

Statement of Basis of the Federal Operating Permit

Oxy Vinyls, LP

Site Name: Battleground Chlor-Alkali Plant
Physical Location: 2800 Park Road 1836
Nearest City: La Porte
County: Harris

Permit Number: O1368
Project Type: Minor Revision

The North American Industry Classification System (NAICS) Code: 325181
NAICS Name: Alkalis and Chlorine Manufacturing

This Statement of Basis sets forth the legal and factual basis for the draft changes to the permit conditions resulting from the minor revision project in accordance with 30 TAC §122.201(a)(4). The applicant has submitted an application for a minor permit revision per §§ 122.215-217. This document may include the following information:

- A description of the facility/area process description;
- A description of the revision project;
- A basis for applying permit shields;
- A list of the federal regulatory applicability determinations;
- A table listing the determination of applicable requirements;
- A list of the New Source Review Requirements;
- The rationale for periodic monitoring methods selected;
- The rationale for compliance assurance methods selected;
- A compliance status; and
- A list of available unit attribute forms.

Prepared on: August 23, 2019

Operating Permit Basis of Determination

Description of Revisions

The minor permit revision added Standard Permit #154862 to the New Source Review Authorization list and to unit HRSG2.

Permit Area Process Description

The facility produces chlorine and caustic and consists of two primary areas: chlorine/caustic production and plant utilities.

The process of making chlorine and sodium hydroxide from sodium chloride involves the electrolysis of nearly saturated sodium chloride brine in an electrolytic (diaphragm) cell. Solid salt and water serve as the basic raw materials for the process. Raw salt is mixed with water and salt recovered from the process, in salt dissolving tanks to form a basic brine solution. The basic brine is combined with soda ash, passed through settling tanks and filtered to remove solid impurities. The waste stream from the settlers and filter backwash, alkaline calcium carbonates, is discharged to the brine sludge pit. The overflow from the brine sludge pit flows into the raw brine reservoir and is recycled into the process.

After impurities are removed from the feedstock brine, it is passed through a process heater and to a saturation tank where salt and hydrogen chloride are added (FIN BG0002) insuring saturation. Saturated brine is directed through a second process heater and fed into diaphragm cells (FIN BGCO37). The Battleground site chlor-alkali unit is made up of three separate circuits. Each circuit can operate independently, but normally the three are operated in parallel.

While flowing through the diaphragm cells, the brine is electrolyzed producing chlorine, hydrogen and sodium hydroxide. The sodium hydroxide product (approximately a 12% solution) is distributed to cell liquor storage tanks. The sodium hydroxide is passed through a steam evaporator increasing the concentration of the caustic solution to approximately 50% NaOH. During the concentration process, salt is crystallized out of the system and removed by centrifuges and filters. The crystallized salt is returned to the process, except for a purge stream discharged to the wastewater reservoir for clarification prior to discharge to a drainage ditch. Filter backwash and other wash streams are also recycled into the process. Approximately half of the 50% NaOH solution is sold, with the remaining transferred to a purification process which employs ammonia.

Chlorine produced in the diaphragm cells is cooled to remove moisture, passed through a sulfuric acid dryer, compressed, liquefied and sent to storage for later off-site shipment. Condensate removed from the chlorine gas stream is passed through a stripping column to remove any remaining chlorine gas. The chlorine gas is returned to the process downstream of the diaphragm cells. Water from the stripper is treated in a chlorine scrubber/neutralizer (BGCO40) with sodium hydroxide.

After condensate has been removed, the chlorine gas is passed through a dryer where it is treated with sulfuric acid. Spent acid from the drying operation is collected and returned to the supplier for regeneration. The dried chlorine gas is compressed and directed to a refrigeration unit where it is liquefied. Liquid chlorine is directed to on-site storage prior to sale. Liquid chlorine can be transported from the Battleground site via pipeline or tank car.

Chlorine gas remaining after the liquefaction process or that collected in the storage tanks is gathered and directed to a chlorine recovery unit where it is treated with carbon tetrachloride. Any remaining chlorine gas is sent back to the liquefaction unit and liquid chlorine is sent to storage. The vent stream from the chlorine recovery unit is sent to carbon-tet recovery (BGC004) unit which reclaims carbon tetrachloride and returns it to storage (BGC001) and the process. The vent stream from this unit (BG0004) is directed off-site for treatment and disposal. An emergency scrubbing system prevents discharges of chlorine in the event of equipment failure.

A by-product of chlorine production is hydrogen, which is collected, cooled and compressed for sale or use by plant utilities. Hydrogen from each of the chlorine circuits is collected in a separate low-pressure header. Each header system is equipped with two hydrogen vents. One vent is from a seal pot (EPNs BGCO71, BGCO72 and BGCO73) that is normally used as both a safety device and a vent for hydrogen that cannot be consumed beneficially. The other vent (EPNs BGCO68, BGCO69 and BGCO70) is a standby vent that is only used when the primary vent cannot be used. Each of the low-pressure vent headers is fed to a compressor, increasing the pressure to approximately 15 psig before it is directed to a common high-pressure vent header. The high-pressure vent header directs hydrogen to either the utilities area or off-site customers. There are two vents (EPNs BGC033 and BGCO34) on the high-pressure vent header which are used to vent hydrogen which cannot be consumed by the on-site co-generation unit or off-site customers.

Air contaminants from the production of chlorine and caustic include: carbon tetrachloride, chlorine, hydrogen, hydrogen chloride, ammonia and freon. In addition standard combustion contaminants are emitted by reciprocating engines which drive emergency generators.

The utilities area consists of two internal combustion gas turbine sets, two heat recovery steam generators (HSRG), a steam turbine and three carbonation towers. The gas turbine sets are General Electric MS 7001 Series E units, equipped with low NOx burners and are fired with natural gas. The gas turbines produce approximately 70 MW of electrical power each with a maximum heat rate of 960 MMBtu/Hr. The HSRGs burn natural gas and hydrogen generated in the diaphragm cells, and have a steam output of approximately 485,000 lbs/hr with a maximum heat rate of 300 MMBtu/Hr. The steam turbine produces approximately 80 MW of electrical power with a steam output of 690,000 lbs/hr. Flue gas from the gas turbines and HSRGs is primarily vented to the atmosphere. However, due to the CO/CO2 content of the flue gas, a slip stream is directed to one of three carbonation scrubbers. The carbonation scrubbers are used on semi-continuous basis to produce a sodium carbonate solution, by scrubbing flue gas with a weak sodium hydroxide solution. Only one tower is used at a time. The combined-cycle power system (turbines/HSRGs) are the major emission units in the utilities area. These units are a source of NOx, CO, VOC, SO2 and PM.

FOPs at Site

The “application area” consists of the emission units and that portion of the site included in the application and this permit. Multiple FOPs may be issued to a site in accordance with 30 TAC § 122.201(e). When there is only one area for the site, then the application information and permit will include all units at the site. Additional FOPs that exist at the site, if any, are listed below.

Additional FOPs: None

Major Source Pollutants

The table below specifies the pollutants for which the site is a major source:

Major Pollutants	VOC, PM, NOX, CO, YES -GHG
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Reading State of Texas’s Federal Operating Permit

The Title V Federal Operating Permit (FOP) lists all state and federal air emission regulations and New Source Review (NSR) authorizations (collectively known as “applicable requirements”) that apply at a particular site or permit area (in the event a site has multiple FOPs). **The FOP does not authorize new emissions or new construction activities.** The FOP begins with an introductory page which is common to all Title V permits. This page gives the details of the company, states the authority of the issuing agency, requires the company to operate in accordance with this permit and 30 Texas Administrative Code (TAC) Chapter 122, requires adherence with NSR requirements of 30 TAC Chapter 116, and finally indicates the permit number and the issuance date.

This is followed by the table of contents, which is generally composed of the following elements. Not all permits will have all of the elements.

- General Terms and Conditions
- Special Terms and Conditions
 - Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting
 - Additional Monitoring Requirements
 - New Source Review Authorization Requirements
 - Compliance Requirements
 - Protection of Stratosphere Ozone
 - Permit Location
 - Permit Shield (30 TAC § 122.148)
- Attachments
 - Applicable Requirements Summary

- Unit Summary
 - Applicable Requirements Summary
- Additional Monitoring Requirements
- Permit Shield
- New Source Review Authorization References
- Compliance Plan
- Alternative Requirements
- Appendix A
 - Acronym list
- Appendix B
 - Copies of major NSR authorizations

General Terms and Conditions

The General Terms and Conditions are the same and appear in all permits. The first paragraph lists the specific citations for 30 TAC Chapter 122 requirements that apply to all Title V permit holders. The second paragraph describes the requirements for record retention. The third paragraph provides details for voiding the permit, if applicable. The fourth paragraph states that the permit holder shall comply with the requirements of 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit. The fifth paragraph provides details on submission of reports required by the permit.

Special Terms and Conditions

Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting. The TCEQ has designated certain applicable requirements as site-wide requirements. A site-wide requirement is a requirement that applies uniformly to all the units or activities at the site. Units with only site-wide requirements are addressed on Form OP-REQ1 and are not required to be listed separately on a OP-UA Form or Form OP-SUM. Form OP-SUM must list all units addressed in the application and provide identifying information, applicable OP-UA Forms, and preconstruction authorizations. The various OP-UA Forms provide the characteristics of each unit from which applicable requirements are established. Some exceptions exist as a few units may have both site-wide requirements and unit specific requirements.

Other conditions. The other entries under special terms and conditions are in general terms referring to compliance with the more detailed data listed in the attachments.

Attachments

Applicable Requirements Summary. The first attachment, the Applicable Requirements Summary, has two tables, addressing unit specific requirements. The first table, the Unit Summary, includes a list of units with applicable requirements, the unit type, the applicable regulation, and the requirement driver. The intent of the requirement driver is to inform the reader that a given unit may have several different operating scenarios and the differences between those operating scenarios.

The applicable requirements summary table provides the detailed citations of the rules that apply to the various units. For each unit and operating scenario, there is an added modifier called the “index number,” detailed citations specifying monitoring and testing requirements, recordkeeping requirements, and reporting requirements. The data for this table are based on data supplied by the applicant on the OP-SUM and various OP-UA forms.

Additional Monitoring Requirement. The next attachment includes additional monitoring the applicant must perform to ensure compliance with the applicable standard. Compliance assurance monitoring (CAM) is often required to provide a reasonable assurance of compliance with applicable emission limitations/standards for large emission units that use control devices to achieve compliance with applicant requirements. When necessary, periodic monitoring (PM) requirements are specified for certain parameters (i.e. feed rates, flow rates, temperature, fuel type and consumption, etc.) to determine if a term and condition or emission unit is operating within specified limits to control emissions. These additional monitoring approaches may be required for two reasons. First, the applicable rules do not adequately specify monitoring requirements (exception- Maximum Achievable Control Technology Standards (MACTs) generally have sufficient monitoring), and second, monitoring may be required to fill gaps in the monitoring requirements of certain

applicable requirements. In situations where the NSR permit is the applicable requirement requiring extra monitoring for a specific emission unit, the preferred solution is to have the monitoring requirements in the NSR permit updated so that all NSR requirements are consolidated in the NSR permit.

Permit Shield. A permit may or may not have a permit shield, depending on whether an applicant has applied for, and justified the granting of, a permit shield. A permit shield is a special condition included in the permit document stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirement(s) or specified applicable state-only requirement(s).

New Source Review Authorization References. All activities which are related to emissions in the state of Texas must have a NSR authorization prior to beginning construction. This section lists all units in the permit and the NSR authorization that allowed the unit to be constructed or modified. Units that do not have unit specific applicable requirements other than the NSR authorization do not need to be listed in this attachment. While NSR permits are not physically a part of the Title V permit, they are legally incorporated into the Title V permit by reference. Those NSR permits whose emissions exceed certain PSD/NA thresholds must also undergo a Federal review of federally regulated pollutants in addition to review for state regulated pollutants.

Compliance Plan. A permit may have a compliance schedule attachment for listing corrective actions plans for any emission unit that is out of compliance with an applicable requirement.

Alternative Requirements. This attachment will list any alternative monitoring plans or alternative means of compliance for applicable requirements that have been approved by the EPA Administrator and/or the TCEQ Executive Director.

Appendix A

Acronym list. This attachment lists the common acronyms used when discussing the FOPs.

Appendix B

Copies of major NSR authorizations applicable to the units covered by this permit have been included in this Appendix, to ensure that all interested persons can access those authorizations.

Stationary vents subject to 30 TAC Chapter 111, Subchapter A, § 111.111(a)(1)(B) addressed in the Special Terms and Conditions

The site contains stationary vents with a flowrate less than 100,000 actual cubic feet per minute (acfm) which are limited, over a six-minute average, to 20% opacity as required by 30 TAC § 111.111(a)(1)(B). As a site may have a large number of stationary vents that fall into this category, they are not required to be listed individually in the permit's Applicable Requirement Summary. This is consistent with EPA's White Paper for Streamlined Development of Part 70 Permit Applications, July 10, 1995, that states that requirements that apply identically to emission units at a site can be treated on a generic basis such as source-wide opacity limits.

Periodic monitoring is specified in Special Term and Condition 3 for stationary vents subject to 30 TAC § 111.111(a)(1)(B) to verify compliance with the 20% opacity limit. These vents are not expected to produce visible emissions during normal operation. The TCEQ evaluated the probability of these sources violating the opacity standards and determined that there is a very low potential that an opacity standard would be exceeded. It was determined that continuous monitoring for these sources is not warranted as there would be very limited environmental benefit in continuously monitoring sources that have a low potential to produce visible emissions. Therefore, the TCEQ set the visible observation monitoring frequency for these sources to once per calendar quarter.

The TCEQ has exempted vents that are not capable of producing visible emissions from periodic monitoring requirements. These vents include sources of colorless VOCs, non-fuming liquids, and other materials that cannot produce emissions that obstruct the transmission of light. Passive ventilation vents, such as plumbing vents, are also included in this category. Since this category of vents are not capable of producing opacity due to the physical or chemical characteristics of the emission source, periodic monitoring is not required as it would not yield any additional data to assure compliance with the 20% opacity standard of 30 TAC § 111.111(a)(1)(B).

In the event that visible emissions are detected, either through the quarterly observation or other credible evidence, such as observations from company personnel, the permit holder shall either report a deviation or perform a Test Method 9 observation to determine the opacity consistent with the 6-minute averaging time specified in 30 TAC § 111.111(a)(1)(B). An additional provision is included to monitor combustion sources more frequently than quarterly if alternate fuels are burned for periods greater than 24 consecutive hours. This will address possible emissions that may arise when switching fuel types.

The applicant opted to comply with the more stringent 20% opacity standard under 30 TAC § 111.111(a)(1)(B) for all stationary vents that are subject to the 30% opacity standard under 30 TAC § 111.111(a)(1)(A).

Stationary Vents subject to 30 TAC Chapter 111 not addressed in the Special Terms and Conditions

All other stationary vents subject to 30 TAC Chapter 111 not covered in the Special Terms and Conditions are listed in the permit's Applicable Requirement Summary. The basis for the applicability determinations for these vents are listed in the Determination of Applicable Requirements table.

Federal Regulatory Applicability Determinations

The following chart summarizes the applicability of the principal air pollution regulatory programs to the permit area:

Regulatory Program	Applicability (Yes/No)
Prevention of Significant Deterioration (PSD)	Yes
Nonattainment New Source Review (NNSR)	No
Minor NSR	Yes
40 CFR Part 60 - New Source Performance Standards	Yes
40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants (NESHAPs)	Yes
40 CFR Part 63 - NESHAPs for Source Categories	Yes
Title IV (Acid Rain) of the Clean Air Act (CAA)	No
Title V (Federal Operating Permits) of the CAA	Yes
Title VI (Stratospheric Ozone Protection) of the CAA	Yes
CSAPR (Cross-State Air Pollution Rule)	No
Federal Implementation Plan for Regional Haze (Texas SO ₂ Trading Program)	No

Insignificant Activities

In general, units not meeting the criteria for inclusion on either Form OP-SUM or Form OP-REQ1 are not required to be addressed in the operating permit application. Examples of these types of units include, but are not limited to, the following:

1. Office activities such as photocopying, blueprint copying, and photographic processes.
2. Sanitary sewage collection and treatment facilities other than those used to incinerate wastewater treatment plant sludge. Stacks or vents for sanitary sewer plumbing traps are also included.
3. Food preparation facilities including, but not limited to, restaurants and cafeterias used for preparing food or beverages primarily for consumption on the premises.
4. Outdoor barbecue pits, campfires, and fireplaces.
5. Laundry dryers, extractors, and tumblers processing bedding, clothing, or other fabric items generated primarily at the premises. This does not include emissions from dry cleaning systems using perchloroethylene or petroleum solvents.
6. Facilities storing only dry, sweet natural gas, including natural gas pressure regulator vents.
7. Any air separation or other industrial gas production, storage, or packaging facility. Industrial gases, for purposes of this list, include only oxygen, nitrogen, helium, neon, argon, krypton, and xenon.
8. Storage and handling of sealed portable containers, cylinders, or sealed drums.
9. Vehicle exhaust from maintenance or repair shops.
10. Storage and use of non-VOC products or equipment for maintaining motor vehicles operated at the site (including but not limited to, antifreeze and fuel additives).
11. Air contaminant detectors and recorders, combustion controllers and shut-off devices, product analyzers, laboratory analyzers, continuous emissions monitors, other analyzers and monitors, and emissions associated with sampling activities. Exception to this category includes sampling activities that are deemed fugitive emissions and under a regulatory leak detection and repair program.
12. Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including but not limited to, assorted vacuum producing devices and laboratory fume hoods.
13. Steam vents, steam leaks, and steam safety relief valves, provided the steam (or boiler feedwater) has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
14. Storage of water that has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
15. Well cellars.
16. Fire or emergency response equipment and training, including but not limited to, use of fire control equipment including equipment testing and training, and open burning of materials or fuels associated with firefighting training.
17. Crucible or pot furnaces with a brim full capacity of less than 450 cubic inches of any molten metal.
18. Equipment used exclusively for the melting or application of wax.
19. All closed tumblers used for the cleaning or deburring of metal products without abrasive blasting, and all open tumblers with a batch capacity of 1,000 lbs. or less.
20. Shell core and shell mold manufacturing machines.
21. Sand or investment molds with a capacity of 100 lbs. or less used for the casting of metals;
22. Equipment used for inspection of metal products.
23. Equipment used exclusively for rolling, forging, pressing, drawing, spinning, or extruding either hot or cold metals by some mechanical means.
24. Instrument systems utilizing air, natural gas, nitrogen, oxygen, carbon dioxide, helium, neon, argon, krypton, and xenon.
25. Battery recharging areas.
26. Brazing, soldering, or welding equipment.

Determination of Applicable Requirements

The tables below include the applicability determinations for the emission units, the index number(s) where applicable, and all relevant unit attribute information used to form the basis of the applicability determination. The unit attribute information is a description of the physical properties of an emission unit which is used to determine the requirements to which the permit holder must comply. For more information about the descriptions of the unit attributes specific Unit Attribute Forms may be viewed at www.tceq.texas.gov/permitting/air/nav/air_all_ua_forms.html.

A list of unit attribute forms is included at the end of this document. Some examples of unit attributes include construction date; product stored in a tank; boiler fuel type; etc.. Generally, multiple attributes are needed to determine the requirements for a given emission unit and index number. The table below lists these attributes in the column entitled "Basis of Determination." Attributes that demonstrate that an applicable requirement applies will be the factual basis for

the specific citations in an applicable requirement that apply to a unit for that index number. The TCEQ Air Permits Division has developed flowcharts for determining applicability of state and federal regulations based on the unit attribute information in a Decision Support System (DSS). These flowcharts can be accessed via the internet at www.tceq.texas.gov/permitting/air/nav/air_supportsys.html. The Air Permits Division staff may also be contacted for assistance at (512) 239-1250.

The attributes for each unit and corresponding index number provide the basis for determining the specific legal citations in an applicable requirement that apply, including emission limitations or standards, monitoring, recordkeeping, and reporting. The rules were found to apply or not apply by using the unit attributes as answers to decision questions found in the flowcharts of the DSS. Some additional attributes indicate which legal citations of a rule apply. The legal citations that apply to each emission unit may be found in the Applicable Requirements Summary table of the draft permit. There may be some entries or rows of units and rules not found in the permit, or if the permit contains a permit shield, repeated in the permit shield area. These are sets of attributes that describe negative applicability, or; in other words, the reason why a potentially applicable requirement does not apply.

If applicability determinations have been made which differ from the available flowcharts, an explanation of the decisions involved in the applicability determination is specified in the column "Changes and Exceptions to RRT." If there were no exceptions to the DSS, then this column has been removed.

The draft permit includes all emission limitations or standards, monitoring, recordkeeping and reporting required by each applicable requirement. If an applicable requirement does not require monitoring, recordkeeping, or reporting, the word "None" will appear in the Applicable Requirements Summary table. If additional periodic monitoring is required for an applicable requirement, it will be explained in detail in the portion of this document entitled "Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected."

When attributes demonstrate that a unit is not subject to an applicable requirement, the applicant may request a permit shield for those items. The portion of this document entitled "Basis for Applying Permit Shields" specifies which units, if any, have a permit shield.

Operational Flexibility

When an emission unit has multiple operating scenarios, it will have a different index number associated with each operating condition. This means that units are permitted to operate under multiple operating conditions. The applicable requirements for each operating condition are determined by a unique set of unit attributes. For example, a tank may store two different products at different points in time. The tank may, therefore, need to comply with two distinct sets of requirements, depending on the product that is stored. Both sets of requirements are included in the permit, so that the permit holder may store either product in the tank.

Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
FBGU02A	@1C R1111-YRD-BLAST	R1111-YRD-BLAST	UNIT TYPE = EMISSION UNIT FUNCTIONALLY IDENTICAL REPLACEMENT [REG VII] = UNIT IS NOT FUNCTIONALLY IDENTICAL REPLACEMENT (DATE CONSTRUCTED/PLACED IN SERVICE = '92+')	The rule citations were determined from an analysis of the rule text and the basis of determination.
FBGU02B	@1C R1111-YRD-PAINT	R1111-YRD-PAINT	UNIT TYPE = EMISSION UNIT FUNCTIONALLY IDENTICAL REPLACEMENT [REG VII] = UNIT IS NOT FUNCTIONALLY IDENTICAL REPLACEMENT (DATE CONSTRUCTED/PLACED IN SERVICE = '92+')	The rule citations were determined from an analysis of the rule text and the basis of determination.
FBGU03	@1C R1111-SW-BLAST	R1111-SW-BLAST	UNIT TYPE = EMISSION UNIT FUNCTIONALLY IDENTICAL REPLACEMENT [REG VII] = UNIT IS NOT FUNCTIONALLY IDENTICAL REPLACEMENT (DATE CONSTRUCTED/PLACED IN SERVICE = '92+')	The rule citations were determined from an analysis of the rule text and the basis of determination.
FBGU04	@1C R1111-SW-PAINT	R1111-SW-PAINT	UNIT TYPE = EMISSION UNIT FUNCTIONALLY IDENTICAL REPLACEMENT [REG VII] = UNIT IS NOT FUNCTIONALLY IDENTICAL REPLACEMENT (DATE CONSTRUCTED/PLACED IN SERVICE = '92+')	The rule citations were determined from an analysis of the rule text and the basis of determination.
BGC-042	30 TAC Chapter 117, Subchapter B	R17ICI-EMERG	Type of Service = Existing diesel fuel-fired engine, located in the Houston/Galveston/Brazoria ozone nonattainment area, operated less than 100 hours/year, on a rolling 12-month average that has not been modified, reconstructed or relocated on or after October 1, 2001	
BGC-042	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-1	HAP Source = The site is an area source of hazardous air pollutants as defined in 40 CFR § 63.2 Brake HP = Stationary RICE with a brake HP greater than or equal to 100 HP and less than 250 HP. Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002. Nonindustrial Emergency Engine = Stationary RICE is not defined in 40 CFR §63.6675 as a residential emergency RICE, a commercial emergency RICE, or an institutional emergency RICE. Service Type = Emergency use where the RICE does not operate as specified in 40 CFR §63.6640(f)(2)(ii) and (iii) or does not operate as specified in 40 CFR §63.6640(f)(4)(ii). Stationary RICE Type = Compression ignition engine	
BGC-074	30 TAC Chapter 117, Subchapter B	R7ICI-EMERG	Type of Service = New, modified, reconstructed or relocated diesel fuel-fired engine, placed into service on or after October 1, 2001, located in the Houston/Galveston/Brazoria ozone nonattainment area, operated less than 100 hours/year, on a rolling 12-month average	
BGC-074	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-1	HAP Source = The site is an area source of hazardous air pollutants as defined in 40 CFR § 63.2 Brake HP = Stationary RICE with a brake HP greater than or equal to 250 HP and less than 300 HP. Construction/Reconstruction Date = Commenced construction or reconstruction on or after December 19, 2002, but before June 12, 2006.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			<p>Nonindustrial Emergency Engine = Stationary RICE is not defined in 40 CFR §63.6675 as a residential emergency RICE, a commercial emergency RICE, or an institutional emergency RICE.</p> <p>Service Type = Emergency use where the RICE does not operate as specified in 40 CFR §63.6640(f)(2)(ii) and (iii) or does not operate as specified in 40 CFR §63.6640(f)(4)(ii).</p> <p>Stationary RICE Type = Compression ignition engine</p>	
BGU-008	30 TAC Chapter 117, Subchapter B	R17ICI-EMERG	Type of Service = New, modified, reconstructed or relocated diesel fuel-fired engine, placed into service on or after October 1, 2001, located in the Houston/Galveston/Brazoria ozone nonattainment area, operated less than 100 hours/year, on a rolling 12-month average	
BGU-008	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-1	<p>HAP Source = The site is an area source of hazardous air pollutants as defined in 40 CFR § 63.2</p> <p>Brake HP = Stationary RICE with a brake HP greater than or equal to 100 HP and less than 250 HP.</p> <p>Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002.</p> <p>Nonindustrial Emergency Engine = Stationary RICE is not defined in 40 CFR §63.6675 as a residential emergency RICE, a commercial emergency RICE, or an institutional emergency RICE.</p> <p>Service Type = Emergency use where the RICE does not operate as specified in 40 CFR §63.6640(f)(2)(ii) and (iii) or does not operate as specified in 40 CFR §63.6640(f)(4)(ii).</p> <p>Stationary RICE Type = Compression ignition engine</p>	
EVGEN1	30 TAC Chapter 117, Subchapter B	R7ICI-ENG	<p>Type of Service = New, modified, reconstructed or relocated diesel fuel-fired engine, placed into service on or after October 1, 2001, located in the Houston/Galveston/Brazoria ozone nonattainment area, operated less than 100 hours/year, on a rolling 12-month average</p> <p>Fuel Fired = Petroleum-based diesel fuel</p>	
EVGEN1	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-1	<p>HAP Source = The site is an area source of hazardous air pollutants as defined in 40 CFR § 63.2</p> <p>Brake HP = Stationary RICE with a brake HP greater than 500 HP.</p> <p>Construction/Reconstruction Date = Commenced construction or reconstruction on or after December 19, 2002, but before June 12, 2006.</p> <p>Nonindustrial Emergency Engine = Stationary RICE is not defined in 40 CFR §63.6675 as a residential emergency RICE, a commercial emergency RICE, or an institutional emergency RICE.</p> <p>Service Type = Emergency use where the RICE does not operate as specified in 40 CFR §63.6640(f)(2)(ii) and (iii) or does not operate as specified in 40 CFR §63.6640(f)(4)(ii).</p> <p>Stationary RICE Type = Compression ignition engine</p>	
GRPENGIN E	30 TAC Chapter 117, Subchapter B	R17ICI-EMERG	<p>Type of Service = Used exclusively in emergency situations [claiming the emergency service exemption under 30 TAC §§ 117.103(a)(6)(D), 117.203(a)(6)(D), 117.303(a)(6)(D) or 117.403(a)(7)(D)]</p> <p>Fuel Fired = Petroleum-based diesel fuel</p>	
GRPENGIN E	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-1	HAP Source = The site is an area source of hazardous air pollutants as defined in 40 CFR § 63.2	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			<p>Brake HP = Stationary RICE with a brake HP greater than or equal to 100 HP and less than 250 HP.</p> <p>Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002.</p> <p>Nonindustrial Emergency Engine = Stationary RICE is not defined in 40 CFR §63.6675 as a residential emergency RICE, a commercial emergency RICE, or an institutional emergency RICE.</p> <p>Service Type = Emergency use where the RICE does not operate as specified in 40 CFR §63.6640(f)(2)(ii) and (iii) or does not operate as specified in 40 CFR §63.6640(f)(4)(ii).</p> <p>Stationary RICE Type = Compression ignition engine</p>	
BGU-042	30 TAC Chapter 115, Storage of VOCs	R5110-EXEMPT	<p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is less than or equal to 1,000 gallons</p>	
UTDIES1	30 TAC Chapter 115, Storage of VOCs	R5110-EXEMPT	<p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p> <p>Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons</p>	
WTCG01	30 TAC Chapter 115, Storage of VOCs	R5110-EXEMPT	<p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p> <p>Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons</p>	
WTCG02	30 TAC Chapter 115, Storage of VOCs	R5110-EXEMPT	<p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p> <p>Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons</p>	
WTCG03	30 TAC Chapter 115, Storage of VOCs	R5110-EXEMPT	<p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Product Stored = Other than crude oil, condensate, or VOC</p>	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
WTUT01	30 TAC Chapter 115, Storage of VOCs	R5110-EXEMPT	<p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p> <p>Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons</p>	
FBGU05	30 TAC Chapter 115, Loading and Unloading of VOC	R5212-LOW-VP	<p>Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal.</p> <p>Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.</p> <p>Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline.</p> <p>Transfer Type = Only unloading.</p> <p>True Vapor Pressure = True vapor pressure less than 0.5 psia.</p>	
HRSG1	30 TAC Chapter 117, Subchapter B	R7ICI-1	<p>NOx Emission Limitation = Title 30 TAC § 117.310(d)(3) [relating to mass emissions cap and trade in 30 TAC Chapter 101, Subchapter H, Division 3 and Emission Specifications for Attainment Demonstration].</p> <p>Unit Type = Other industrial, commercial, or institutional boiler.</p> <p>Maximum Rated Capacity = MRC is greater than or equal to 250 MMBtu/hr.</p> <p>NOx Monitoring System = Continuous emissions monitoring system.</p> <p>Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).</p> <p>CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option.</p> <p>CO Monitoring System = Continuous emissions monitoring system complying with 30 TAC § 117.8100(a)(1).</p> <p>EGF System Cap Unit = The unit is used as an electric generating facility to generate electricity for sale to the electric grid.</p> <p>Fuel Type #1 = Natural gas.</p> <p>Fuel Type #2 = Gaseous fuel other than natural gas landfill gas or renewable non-fossil fuel gases.</p> <p>NOx Emission Limit Average = Emission limit in pounds/MMBtu on a rolling 30-day and 24-hour average.</p> <p>NOx Reductions = No NO_x reduction.</p> <p>Annual Heat Input = Annual heat input is greater than 2.2(10¹¹) Btu/yr, based on rolling 12-month average.</p> <p>Common Stack Combined = The unit is vented through a common stack; the total rated heat input from combined units is greater than or equal to 250 MMBtu/hr; and the annual combined heat input is greater than 2.2(10¹¹) Btu/yr.</p>	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
HRSG1	40 CFR Part 60, Subpart D	60D-GAS	<p>Construction/Modification Date = After September 18, 1978.</p> <p>D-Series Fuel Type #1 = Gaseous fossil fuel.</p> <p>Covered Under Subpart Da = The steam generating unit is not covered under 40 CFR Part 60, Subpart Da.</p> <p>Changes to Existing Affected Facility = No change has been made to the existing fossil fuel-fired steam generating unit.</p> <p>Alternate 43D = No alternative requirement is used for SO₂, unit is complying with requirements of § 60.43(a) and (b).</p> <p>Heat Input Rate = Heat input rate is greater than 250 MMBtu/hr (73 MW).</p> <p>Alternate 42C = The facility is meeting the requirements of § 60.42(a) for PM.</p> <p>Alternate 44E = The facility is meeting the requirements of § 60.44(a), (b), and (d) for NO_x.</p> <p>Flue Gas Desulfurization = The unit does not utilize a flue gas desulfurization device.</p> <p>PM CEMS = The facility does not use a CEMS to measure PM.</p> <p>Fuel Sampling and Analysis = The unit uses fuel sampling and analysis for monitoring of sulfur dioxide emissions.</p> <p>Gas or Liquid Fuel Only = Burns only gaseous or liquid fossil fuel (not residual oil) with potential SO₂ emissions rates of 0.060 lb/MMBtu or less, does not use post combustion technology to reduce of SO₂ or PM, and monitors SO₂ emissions by sampling or fuel receipts.</p> <p>Cyclone-Fired Unit = The unit is not a cyclone-fired unit.</p> <p>Fuels with 0.33 Percent or Less Sulfur = Facility does not use post combustion technology (except a wet scrubber) for reducing PM, SO₂, or CO, burns only gaseous fuels or fuel oils that contain 0.30 % sulfur by weight or less, and operates so CO emissions are 0.15 lb/MMBtu average.</p> <p>NO_x Monitoring Type = It was demonstrated during the performance test that emissions of NO_x are less than 70% of applicable standards in 40 CFR § 60.44.</p> <p>PM CEMS Petition = No petition has been granted to install a PM CEMS as an alternative to the CEMS for monitoring opacity emissions.</p>	
HRSG2	30 TAC Chapter 117, Subchapter B	R7ICI-2	<p>NO_x Emission Limitation = Title 30 TAC § 117.310(d)(3) [relating to mass emissions cap and trade in 30 TAC Chapter 101, Subchapter H, Division 3 and Emission Specifications for Attainment Demonstration].</p> <p>Unit Type = Other industrial, commercial, or institutional boiler.</p> <p>Maximum Rated Capacity = MRC is greater than or equal to 250 MMBtu/hr.</p> <p>NO_x Monitoring System = Continuous emissions monitoring system.</p> <p>Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).</p> <p>CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option.</p> <p>CO Monitoring System = Continuous emissions monitoring system complying with 30 TAC § 117.8100(a)(1).</p> <p>EGF System Cap Unit = The unit is used as an electric generating facility to generate electricity for sale to the electric grid.</p> <p>Fuel Type #1 = Natural gas.</p>	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			<p>Fuel Type #2 = Gaseous fuel other than natural gas landfill gas or renewable non-fossil fuel gases.</p> <p>NO_x Emission Limit Average = Emission limit in pounds/MMBtu on a rolling 30-day and 24-hour average.</p> <p>NO_x Reductions = No NO_x reduction.</p> <p>Annual Heat Input = Annual heat input is greater than 2.2(10¹¹) Btu/yr, based on rolling 12-month average.</p> <p>Common Stack Combined = The unit is vented through a common stack; the total rated heat input from combined units is greater than or equal to 250 MMBtu/hr; and the annual combined heat input is greater than 2.2(10¹¹) Btu/yr.</p>	
HRSG2	40 CFR Part 60, Subpart D	60D-GAS	<p>Construction/Modification Date = After September 18, 1978.</p> <p>D-Series Fuel Type #1 = Gaseous fossil fuel.</p> <p>Covered Under Subpart Da = The steam generating unit is not covered under 40 CFR Part 60, Subpart Da.</p> <p>Changes to Existing Affected Facility = No change has been made to the existing fossil fuel-fired steam generating unit.</p> <p>Alternate 43D = No alternative requirement is used for SO₂, unit is complying with requirements of § 60.43(a) and (b).</p> <p>Heat Input Rate = Heat input rate is greater than 250 MMBtu/hr (73 MW).</p> <p>Alternate 42C = The facility is meeting the requirements of § 60.42(a) for PM.</p> <p>Alternate 44E = The facility is meeting the requirements of § 60.44(a), (b), and (d) for NO_x.</p> <p>Flue Gas Desulfurization = The unit does not utilize a flue gas desulfurization device.</p> <p>PM CEMS = The facility does not use a CEMS to measure PM.</p> <p>Fuel Sampling and Analysis = The unit uses fuel sampling and analysis for monitoring of sulfur dioxide emissions.</p> <p>Gas or Liquid Fuel Only = Burns only gaseous or liquid fossil fuel (not residual oil) with potential SO₂ emissions rates of 0.060 lb/MMBtu or less, does not use post combustion technology to reduce of SO₂ or PM, and monitors SO₂ emissions by sampling or fuel receipts.</p> <p>Cyclone-Fired Unit = The unit is not a cyclone-fired unit.</p> <p>Fuels with 0.33 Percent or Less Sulfur = Facility does not use post combustion technology (except a wet scrubber) for reducing PM, SO₂, or CO, burns only gaseous fuels or fuel oils that contain 0.30 % sulfur by weight or less, and operates so CO emissions are 0.15 lb/MMBtu average.</p> <p>NO_x Monitoring Type = It was demonstrated during the performance test that emissions of NO_x are less than 70% of applicable standards in 40 CFR § 60.44.</p> <p>PM CEMS Petition = No petition has been granted to install a PM CEMS as an alternative to the CEMS for monitoring opacity emissions.</p>	
HRSG3	30 TAC Chapter 117, Subchapter B	R7ICI-3	<p>NO_x Emission Limitation = Title 30 TAC § 117.310(d)(3) [relating to mass emissions cap and trade in 30 TAC Chapter 101, Subchapter H, Division 3 and Emission Specifications for Attainment Demonstration].</p> <p>Unit Type = Other industrial, commercial, or institutional boiler.</p>	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			<p>Maximum Rated Capacity = MRC is greater than or equal to 250 MMBtu/hr.</p> <p>NOx Monitoring System = Continuous emissions monitoring system.</p> <p>Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).</p> <p>CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option.</p> <p>CO Monitoring System = Continuous emissions monitoring system complying with 30 TAC § 117.8100(a)(1).</p> <p>EGF System Cap Unit = The unit is used as an electric generating facility to generate electricity for sale to the electric grid.</p> <p>Fuel Type #1 = Natural gas.</p> <p>NH3 Emission Limitation = Title 30 TAC § 117.310(c)(2).</p> <p>NOx Emission Limit Average = Emission limit in pounds/MMBtu on a rolling 30-day and 24-hour average.</p> <p>NH3 Emission Monitoring = Continuous emissions monitoring system.</p> <p>NOx Reductions = Post combustion control technique with ammonia injection.</p> <p>Annual Heat Input = Annual heat input is greater than 2.2(10¹¹) Btu/yr, based on rolling 12-month average.</p> <p>Common Stack Combined = The unit is vented through a common stack; the total rated heat input from combined units is greater than or equal to 250 MMBtu/hr; and the annual combined heat input is greater than 2.2(10¹¹) Btu/yr.</p>	
HRSG3	40 CFR Part 60, Subpart Db	60DB-GAS	<p>Construction/Modification Date = Modified after July 9, 1997, and on or before February 28, 2005.</p> <p>D-Series Fuel Type #1 = Natural gas.</p> <p>Heat Input Capacity = Heat input capacity is greater than 250 MMBtu/hr (73 MW).</p> <p>PM Monitoring Type = No particulate monitoring.</p> <p>Opacity Monitoring Type = No particulate (opacity) monitoring.</p> <p>Subpart Da = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart Da.</p> <p>Changes to Existing Affected Facility = No change has been made to the existing steam generating unit, which was not previously subject to 40 CFR Part 60, Subpart Db, for the sole purpose of combusting gases containing totally reduced sulfur as defined under 40 CFR § 60.281.</p> <p>NOx Monitoring Type = Continuous emission monitoring system.</p> <p>Subpart D = The affected facility meets the applicability requirements of 40 CFR Part 60, Subpart D.</p> <p>SO2 Monitoring Type = Fuel certification (maintaining receipts per § 60.49b(r)(1)).</p> <p>Subpart Ea, Eb or AAAA = The affected facility does not meet applicability requirements of and is subject to 40 CFR Part 60, Subpart Ea, Eb or AAAA.</p> <p>Subpart J = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart J.</p>	<p>-- Affected Pollutant - NO_x:</p> <p>Added Main Standard § 60.44b(l)(1)</p> <p>Added Related Standard § 60.44b(l)</p> <p>Added Monitoring/Testing § 60.46b(a)</p> <p>Deleted Main Standard § 60.44b(a)(4)(i)</p>

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			<p>Subpart E = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart E.</p> <p>Subpart KKKK = The affected facility is not a heat recovery steam generator associated with combined cycle gas turbines and that meets applicability requirements of and is subject to 40 CFR Part 60, Subpart KKKK.</p> <p>Technology Type = None.</p> <p>ACF Option - SO₂ = Other ACF or no ACF.</p> <p>Subpart Cb or BBBB = The affected facility is not covered by an EPA approved State or Federal section 111(d)/129 plan implementing 40 CFR Part 60, Subpart Cb or BBBB emission guidelines.</p> <p>Unit Type = Duct burner as part of combined cycle system (compliance on a 30-day rolling average basis determined by using a continuous emission monitoring system).</p> <p>ACF Option - PM = Other ACF or no ACF.</p> <p>ACF Option - NO_x = Other ACF or no ACF.</p> <p>Fuel Heat Input = The heat input is greater than 30% from combustion of coal and oil in the duct burner and heat input is less than 70% from the exhaust gases entering the duct burner.</p>	
BGU-026	30 TAC Chapter 117, Subchapter B	R7ICI-GAS	<p>Fuel Flow Monitoring = Fuel flow is with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).</p> <p>Megawatt Rating = MR is greater than or equal to 30 MW.</p> <p>CO Emission Limitation = Title 30 TAC § 117.310(c)(1).</p> <p>EGF System Cap Unit = The engine is used as an electric generating facility to generate electricity for sale to the electric grid.</p> <p>Averaging Method = Complying with the applicable emission limit using a 30-day rolling average.</p> <p>CO Monitoring System = Continuous emissions monitoring system complying with 30 TAC § 117.8100(a)(1).</p> <p>Functionally Identical Replacement = The stationary gas turbine is not a functionally identical replacement for a unit or group of units.</p> <p>NO_x Reduction = No NO_x reduction.</p> <p>Service Type = Stationary gas turbine.</p> <p>NO_x Emission Limitation = Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(10) or 117.310(a)(11).</p> <p>NO_x Monitoring System = Continuous emissions monitoring system.</p>	
BGU-026	40 CFR Part 60, Subpart GG	60GG-GAS	<p>NO_x Control Method = NO_x control method other than water or steam injection or selective catalytic reduction.</p> <p>Peak Load Heat Input = Heat Input is greater than 100 MMBtu/hr (107.2 GJ/hr)</p> <p>Construction/Modification Date = After October 3, 1977 and on or before January 27, 1982.</p> <p>NO_x Monitoring Method = Continuous emission monitoring system.</p> <p>Sulfur Content = Compliance is demonstrated by determining the sulfur content of the fuel.</p> <p>Turbine Cycle = Unit recovers heat from the gas turbine exhaust to heat water or generate steam.</p> <p>Fuel Type Fired = Natural gas meeting the definition in § 60.331(u).</p>	-- Affected Pollutant - NO _x : Added Main Standard § 60.332(j)

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			<p>Subpart GG Service Type = Type of service other than research and development, emergency, military or electrical utility generation.</p> <p>Federal Register = Required in the September 10, 1979 Federal Register (44 FR 52792) to comply with 40 CFR § 60.332(a)(1).</p> <p>Fuel Supply = Stationary gas turbine is supplied its fuel without intermediate bulk storage.</p> <p>Fuel Monitoring Schedule = Fuel meets the definition of natural gas in 40 CFR § 60.331(u) and is not monitored.</p>	
BGU-029	30 TAC Chapter 117, Subchapter B	R7ICI-GAS	<p>Fuel Flow Monitoring = Fuel flow is with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).</p> <p>Megawatt Rating = MR is greater than or equal to 30 MW.</p> <p>CO Emission Limitation = Title 30 TAC § 117.310(c)(1).</p> <p>EGF System Cap Unit = The engine is used as an electric generating facility to generate electricity for sale to the electric grid.</p> <p>Averaging Method = Complying with the applicable emission limit using a 30-day rolling average.</p> <p>CO Monitoring System = Continuous emissions monitoring system complying with 30 TAC § 117.8100(a)(1).</p> <p>Functionally Identical Replacement = The stationary gas turbine is not a functionally identical replacement for a unit or group of units.</p> <p>NOx Reduction = No NO_x reduction.</p> <p>Service Type = Stationary gas turbine.</p> <p>NOx Emission Limitation = Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(10) or 117.310(a)(11).</p> <p>NOx Monitoring System = Continuous emissions monitoring system.</p>	
BGU-029	40 CFR Part 60, Subpart GG	60GG-GAS	<p>NOx Control Method = NO_x control method other than water or steam injection or selective catalytic reduction.</p> <p>Peak Load Heat Input = Heat Input is greater than 100 MMBtu/hr (107.2 GJ/hr)</p> <p>Construction/Modification Date = After October 3, 1977 and on or before January 27, 1982.</p> <p>NOx Monitoring Method = Continuous emission monitoring system.</p> <p>Sulfur Content = Compliance is demonstrated by determining the sulfur content of the fuel.</p> <p>Turbine Cycle = Unit recovers heat from the gas turbine exhaust to heat water or generate steam.</p> <p>Fuel Type Fired = Natural gas meeting the definition in § 60.331(u).</p> <p>Subpart GG Service Type = Type of service other than research and development, emergency, military or electrical utility generation.</p> <p>Federal Register = Required in the September 10, 1979 Federal Register (44 FR 52792) to comply with 40 CFR § 60.332(a)(1).</p> <p>Fuel Supply = Stationary gas turbine is supplied its fuel without intermediate bulk storage.</p> <p>Fuel Monitoring Schedule = Fuel meets the definition of natural gas in 40 CFR § 60.331(u) and is not monitored.</p>	<p>-- Affected Pollutant - NO_x:</p> <p>Added Main Standard § 60.332(j)</p>

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
BGU-030	30 TAC Chapter 117, Subchapter B	R7ICI-GAS	<p>Fuel Flow Monitoring = Fuel flow is with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a).</p> <p>Megawatt Rating = MR is greater than or equal to 30 MW.</p> <p>CO Emission Limitation = Title 30 TAC § 117.310(c)(1).</p> <p>EGF System Cap Unit = The engine is used as an electric generating facility to generate electricity for sale to the electric grid.</p> <p>Averaging Method = Complying with the applicable emission limit using a 30-day rolling average.</p> <p>CO Monitoring System = Continuous emissions monitoring system complying with 30 TAC § 117.8100(a)(1).</p> <p>Functionally Identical Replacement = The stationary gas turbine is not a functionally identical replacement for a unit or group of units.</p> <p>NH3 Emission Limitation = Title 30 TAC § 117.310(c)(2).</p> <p>NOx Reduction = Post combustion control technique with ammonia injection.</p> <p>Service Type = Stationary gas turbine.</p> <p>NH3 Monitoring = Continuous emissions monitoring system.</p> <p>NOx Emission Limitation = Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(10) or 117.310(a)(11).</p> <p>NOx Monitoring System = Continuous emissions monitoring system.</p>	
BGU-030	40 CFR Part 60, Subpart GG	60GG-GAS	<p>Duct Burner = The turbine is part of a combined cycle turbine system equipped with supplemental heat (duct burner).</p> <p>NOx Control Method = Selective catalytic reduction.</p> <p>Peak Load Heat Input = Heat Input is greater than 100 MMBtu/hr (107.2 GJ/hr)</p> <p>Construction/Modification Date = On or after October 3, 1982 and before July 8, 2004.</p> <p>NOx Allowance = The owner or operator is not electing to use a NO_x allowance in determining emission limits in 40 CFR § 60.332(a).</p> <p>NOx Monitoring Method = Continuous emission monitoring system.</p> <p>Sulfur Content = Compliance is demonstrated by determining the sulfur content of the fuel.</p> <p>Turbine Cycle = Unit recovers heat from the gas turbine exhaust to heat water or generate steam.</p> <p>Fuel Type Fired = Natural gas meeting the definition in § 60.331(u).</p> <p>Subpart GG Service Type = Type of service other than research and development, emergency, military or electrical utility generation.</p> <p>Fuel Supply = Stationary gas turbine is supplied its fuel without intermediate bulk storage.</p> <p>Fuel Monitoring Schedule = Fuel meets the definition of natural gas in 40 CFR § 60.331(u) and is not monitored.</p> <p>Manufacturer's Rated Base Load = Base load is greater than 30 MW.</p>	
BGU-026	30 TAC Chapter 111, Visible Emissions	R1111-100	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			<p>Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.</p> <p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = After January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.</p>	
BGU-029	30 TAC Chapter 111, Visible Emissions	R1111-100	<p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.</p> <p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = After January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.</p>	
BGU-030	30 TAC Chapter 111, Visible Emissions	R1111-100	<p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.</p> <p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = After January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.</p>	
BGC-124	30 TAC Chapter 115, Degreasing Processes	R5412-1	<p>Solvent Degreasing Machine Type = Cold solvent cleaning machine.</p> <p>Alternate Control Requirement = The TCEQ Executive Director has not approved an alternative control requirement as allowed under 30 TAC § 115.413 or not alternative has been requested.</p> <p>Solvent Sprayed = A solvent is sprayed.</p> <p>Solvent Vapor Pressure = Solvent vapor pressure is less than or equal to 0.6 psia as measured at 100 degrees Fahrenheit.</p> <p>Solvent Heated = The solvent is not heated to a temperature greater than 120° F.</p> <p>Parts Larger than Drainage = No cleaned parts for which the machine is authorized to clean are larger than the internal drainage facility of the machine.</p> <p>Drainage Area = Area is less than 16 square inches.</p> <p>Disposal in Enclosed Containers = Waste solvent is properly disposed of in enclosed containers.</p>	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
FBGU02B	30 TAC Chapter 115, Subchapter E, Division 5	R5450-EXEMPT	<p>Coating Used = The VOC content of the coating used is stated in terms of lb VOC/gallon of coating.</p> <p>Exemption = No exemption is being met.</p> <p>90% Vapor Control = The process is not using a vapor control system capable of achieving a 90% control efficiency.</p> <p>Alternative Control = No alternative control is being used.</p> <p>Vapor Control = A vapor control device is not used to meet the VOC emission limits.</p> <p>Drying Method = Applied coating is air dried.</p> <p>Low Usage = Surface coating operations do not meet any of the above exemptions.</p> <p>Application System = The surface coating or surface coating process used is specified in §115.451(f)(1)-(7).</p> <p>Process Type = Miscellaneous metal parts surface coating process.</p>	
FBGU02B	30 TAC Chapter 115, Subchapter E, Division 5	R5450-NORMAL	<p>Coating Used = The VOC content of the coating used is stated in terms of lb VOC/gallon of coating.</p> <p>Exemption = No exemption is being met.</p> <p>90% Vapor Control = The process is not using a vapor control system capable of achieving a 90% control efficiency.</p> <p>Alternative Control = No alternative control is being used.</p> <p>Vapor Control = A vapor control device is not used to meet the VOC emission limits.</p> <p>Drying Method = Applied coating is air dried.</p> <p>Low Usage = Surface coating operations do not meet any of the above exemptions.</p> <p>Application System = The surface coating or surface coating process is not specified in §155.451(f)(1)-(7).</p> <p>Process Type = Miscellaneous metal parts surface coating process.</p>	
BGC-NS	40 CFR Part 63, Subpart VVVVVV	63VVVVVV	CMPU = CMPU is subject to 40 CFR Part 63, Subpart VVVVVV	

* - The "unit attributes" or operating conditions that determine what requirements apply

** - Notes changes made to the automated results from the DSS, and a brief explanation why

NSR Versus Title V FOP

The state of Texas has two Air permitting programs, New Source Review (NSR) and Title V Federal Operating Permits. The two programs are substantially different both in intent and permit content.

NSR is a preconstruction permitting program authorized by the Texas Clean Air Act and Title I of the Federal Clean Air Act (FCAA). The processing of these permits is governed by 30 Texas Administrative Code (TAC) Chapter 116.111. The Title V Federal Operating Program is a federal program authorized under Title V of the FCAA that has been delegated to the state of Texas to administer and is governed by 30 TAC Chapter 122. The major differences between the two permitting programs are listed in the table below:

NSR Permit	Federal Operating Permit (FOP)
Issued Prior to new Construction or modification of an existing facility	For initial permit with application shield, can be issued after operation commences; significant revisions require approval prior to operation.
Authorizes air emissions	Codifies existing applicable requirements, does not authorize new emissions
Ensures issued permits are protective of the environment and human health by conducting a health effects review and that requirement for best available control technology (BACT) is implemented.	Applicable requirements listed in permit are used by the inspectors to ensure proper operation of the site as authorized. Ensures that adequate monitoring is in place to allow compliance determination with the FOP.
Up to two Public notices may be required. Opportunity for public comment and contested case hearings for some authorizations.	One public notice required. Opportunity for public comments. No contested case hearings.
Applies to all point source emissions in the state.	Applies to all major sources and some non-major sources identified by the EPA.
Applies to facilities: a portion of site or individual emission sources	One or multiple FOPs cover the entire site (consists of multiple facilities)
Permits include terms and conditions under which the applicant must construct and operate its various equipment and processes on a facility basis.	Permits include terms and conditions that specify the general operational requirements of the site; and also include codification of all applicable requirements for emission units at the site.
Opportunity for EPA review for Federal Prevention of Significant Deterioration (PSD) and Nonattainment (NA) permits for major sources.	Opportunity for EPA review, Affected states review, and a Public petition period for every FOP.
Permits have a table listing maximum emission limits for pollutants	Permit has an applicable requirements table and Periodic Monitoring (PM) / Compliance Assurance Monitoring (CAM) tables which document applicable monitoring requirements.
Permits can be altered or amended upon application by company. Permits must be issued before construction or modification of facilities can begin.	Permits can be revised through several revision processes, which provide for different levels of public notice and opportunity to comment. Changes that would be significant revisions require that a revised permit be issued before those changes can be operated.
NSR permits are issued independent of FOP requirements.	FOP are independent of NSR permits, but contain a list of all NSR permits incorporated by reference

New Source Review Requirements

Below is a list of the New Source Review (NSR) permits for the permitted area. These NSR permits are incorporated by reference into the operating permit and are enforceable under it. These permits can be found in the main TCEQ file room,

located on the first floor of Building E, 12100 Park 35 Circle, Austin, Texas. In addition, many of the permits are accessible online through the link provided below. The Public Education Program may be contacted at 1-800-687-4040 or the Air Permits Division (APD) may be contacted at 1-512-239-1250 for help with any question.

Additionally, the site contains emission units that are permitted by rule under the requirements of 30 TAC Chapter 106, Permits by Rule. Permit by Rule (PBR) registrations submitted by permittees are also available online through the link provided below. The following table specifies the PBRs that apply to the site.

The TCEQ has interpreted the emission limits prescribed in 30 TAC §106.4(a) as both emission thresholds and default emission limits. The emission limits in 30 TAC §106.4(a) are all considered applicable to each facility as a threshold matter to ensure that the owner/operator qualifies for the PBR authorization. Those same emission limits are also the default emission limits if the specific PBR does not further limit emissions or there is no lower, certified emission limit claimed by the owner/operator.

This interpretation is consistent with how TCEQ has historically determined compliance with the emission limits prior to the addition of the “as applicable” language. The “as applicable” language was added in 2014 as part of changes to the sentence structure in a rulemaking that made other changes to address greenhouse gases and was not intended as a substantive rule change. This interpretation also provides for effective and practical enforcement of 30 TAC §106.4(a), since for the TCEQ to effectively enforce the emission limits in 30 TAC §106.4(a) as emission thresholds, all emission limits must apply. As provided by 30 TAC §106.4(a)(2) and (3), an owner/operator shall not claim a PBR authorization if the facility is subject to major New Source Review. The practical and legal effect of the language in 30 TAC § 106.4 is that if a facility does not emit a pollutant, then the potential to emit for that particular pollutant is zero, and thus, the facility is not authorized to emit the pollutant pursuant to the PBR.

The status of air permits, applications, and PBR registrations may be found by performing the appropriate search of the databases located at the following website:

www.tceq.texas.gov/permitting/air/nav/air_status_permits.html

Details on how to search the databases are available in the **Obtaining Permit Documents** section below.

New Source Review Authorization References

Prevention of Significant Deterioration (PSD) Permits	
PSD Permit No.: PSDTX276M2	Issuance Date: 08/27/2013
Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 154862	Issuance Date: 01/18/2019
Authorization No.: 7647B	Issuance Date: 08/27/2013
Authorization No.: 9B	Issuance Date: 05/19/2014
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.122	Version No./Date: 03/14/1997
Number: 106.227	Version No./Date: 09/04/2000
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.262	Version No./Date: 09/04/2000
Number: 106.262	Version No./Date: 11/01/2003
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.264	Version No./Date: 09/04/2000
Number: 106.265	Version No./Date: 09/04/2000

New Source Review Authorization References

Number: 106.355	Version No./Date: 11/01/2001
Number: 106.373	Version No./Date: 09/04/2000
Number: 106.412	Version No./Date: 09/04/2000
Number: 106.433	Version No./Date: 09/04/2000
Number: 106.452	Version No./Date: 09/04/2000
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.473	Version No./Date: 09/04/2000
Number: 106.511	Version No./Date: 09/04/2000
Number: 5	Version No./Date: 04/05/1995
Number: 6	Version No./Date: 09/17/1973
Number: 6	Version No./Date: 01/08/1980
Number: 6	Version No./Date: 05/12/1981
Number: 7	Version No./Date: 09/12/1989
Number: 8	Version No./Date: 12/01/1972
Number: 53	Version No./Date: 11/05/1986
Number: 102	Version No./Date: 05/12/1981
Number: 103	Version No./Date: 10/04/1995
Number: 107	Version No./Date: 03/15/1985

Emission Units and Emission Points

In air permitting terminology, any source capable of generating emissions (for example, an engine or a sandblasting area) is called an Emission Unit. For purposes of Title V, emission units are specifically listed in the operating permit when they have applicable requirements other than New Source Review (NSR), or when they are listed in the permit shield table.

The actual physical location where the emissions enter the atmosphere (for example, an engine stack or a sand-blasting yard) is called an emission point. For New Source Review preconstruction permitting purposes, every emission unit has an associated emission point. Emission limits are listed in an NSR permit, associated with an emission point. This list of emission points and emission limits per pollutant is commonly referred to as the "Maximum Allowable Emission Rate Table", or "MAERT" for short. Specifically, the MAERT lists the Emission Point Number (EPN) that identifies the emission point, followed immediately by the Source Name, identifying the emission unit that is the source of those emissions on this table.

Thus, by reference, an emission unit in a Title V operating permit is linked by reference number to an NSR authorization, and its related emission point.

Monitoring Sufficiency

Federal and state rules, 40 CFR § 70.6(a)(3)(i)(B) and 30 TAC § 122.142(c) respectively, require that each federal operating permit include additional monitoring for applicable requirements that lack periodic or instrumental monitoring (which may include recordkeeping that serves as monitoring) that yields reliable data from a relevant time period that are representative of the emission unit's compliance with the applicable emission limitation or standard. Furthermore, the federal operating permit must include compliance assurance monitoring (CAM) requirements for emission sources that meet the applicability criteria of 40 CFR Part 64 in accordance with 40 CFR § 70.6(a)(3)(i)(A) and 30 TAC § 122.604(b).

With the exception of any emission units listed in the Periodic Monitoring or CAM Summaries in the FOP, the TCEQ Executive Director has determined that the permit contains sufficient monitoring, testing, recordkeeping, and reporting requirements that assure compliance with the applicable requirements. If applicable, each emission unit that requires additional monitoring in the form of periodic monitoring or CAM is described in further detail under the Rationale for CAM/PM Methods Selected section following this paragraph.

Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected

Periodic Monitoring:

The Federal Clean Air Act requires that each federal operating permit include monitoring sufficient to assure compliance with the terms and conditions of the permit. Most of the emission limits and standards applicable to emission units at Title V sources include adequate monitoring to show that the units meet the limits and standards. For those requirements that do not include monitoring, or where the monitoring is not sufficient to assure compliance, the federal operating permit must include such monitoring for the emission units affected. The following emission units are subject to periodic monitoring requirements because the emission units are subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement that does not already require monitoring, or the monitoring for the applicable requirement is not sufficient to assure compliance:

Unit/Group/Process Information	
ID No.: BGC-124	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Degreasing Processes	SOP Index No.: R5412-1
Pollutant: VOC	Main Standard: § 115.412(1)
Monitoring Information	
Indicator: Visual Inspection	
Minimum Frequency: Monthly	
Averaging Period: n/a	
Deviation Limit: Any monitoring data which indicates that the cold cleaner is not in compliance with the applicable requirements in 30 TAC §115.412(1)(A), (C), (D) and (F) shall be considered and reported as a deviation.	
Basis of monitoring: The monitoring option to cover cold cleaner or the open-top vapor cleaner was included in the EPA "Periodic Monitoring Technical Reference Document" (April 1999) to monitor VOC sources. In addition to covering the cleaner records of monthly inspections of equipment is an effective way to ensure that the system is operating in accordance with its design.	

Unit/Group/Process Information	
ID No.: BGU-026	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-100
Pollutant: PM (Opacity)	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Fuel Type	
Minimum Frequency: Annually	
Averaging Period: n/a	
Deviation Limit: If an alternate fuel is fired, either alone or in combination with the specified gas, it shall be considered and reported as a deviation.	
Basis of monitoring: Industry has demonstrated through performance tests and historical data that opacity and particulate matter standards are consistently met when combustion units fire natural gas only.	

Unit/Group/Process Information	
ID No.: BGU-029	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-100
Pollutant: PM (Opacity)	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Fuel Type	
Minimum Frequency: Annually	
Averaging Period: n/a	
Deviation Limit: If an alternate fuel is fired, either alone or in combination with the specified gas, it shall be considered and reported as a deviation.	
Basis of monitoring: Industry has demonstrated through performance tests and historical data that opacity and particulate matter standards are consistently met when combustion units fire natural gas only.	

Unit/Group/Process Information	
ID No.: BGU-030	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-100
Pollutant: PM (Opacity)	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Fuel Type	
Minimum Frequency: Annually	
Averaging Period: n/a	
Deviation Limit: If an alternate fuel is fired, either alone or in combination with the specified gas, it shall be considered and reported as a deviation.	
Basis of monitoring: Industry has demonstrated through performance tests and historical data that opacity and particulate matter standards are consistently met when combustion units fire natural gas only.	

Unit/Group/Process Information	
ID No.: FBGU02A	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-YRD-BLAST
Pollutant: PM(OPACITY)	Main Standard: § 111.111(a)(8)(A)
Monitoring Information	
Indicator: Visible emissions	
Minimum Frequency: Once per quarter (when operational)	
Averaging Period: n/a	
Deviation Limit: Opacity limit of 30% for abrasive blasting operations	
Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.	

Unit/Group/Process Information	
ID No.: FBGU02B	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-YRD-PAINT
Pollutant: PM(OPACITY)	Main Standard: § 111.111(a)(8)(A)
Monitoring Information	
Indicator: Visible emissions	
Minimum Frequency: Once per quarter (when operational)	
Averaging Period: n/a	
Deviation Limit: Opacity limit of 30% for paint operations	
<p>Basis of monitoring:</p> <p>The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.</p>	

Unit/Group/Process Information	
ID No.: FBGU03	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-SW-BLAST
Pollutant: PM(OPACITY)	Main Standard: § 111.111(a)(8)(A)
Monitoring Information	
Indicator: Visible emissions	
Minimum Frequency: Once per quarter (when operational)	
Averaging Period: n/a	
Deviation Limit: Opacity limit of 30% for abrasive blasting operations	
<p>Basis of monitoring:</p> <p>The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.</p>	

Unit/Group/Process Information	
ID No.: FBGU04	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-SW-PAINT
Pollutant: PM(OPACITY)	Main Standard: § 111.111(a)(8)(A)
Monitoring Information	
Indicator: Visible emissions	
Minimum Frequency: Once per quarter (when operational)	
Averaging Period: n/a	
Deviation Limit: Opacity limit of 30% for paint operations	
<p>Basis of monitoring:</p> <p>The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.</p>	

Unit/Group/Process Information	
ID No.: HRSG1	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart D	SOP Index No.: 60D-GAS
Pollutant: PM	Main Standard: § 60.42(a)(1)
Monitoring Information	
Indicator: Fuel Type	
Minimum Frequency: Annually	
Averaging Period: n/a	
Deviation Limit: If an alternate fuel is fired, either alone or in combination with the specified gas, it shall be considered and reported as a deviation.	
<p>Basis of monitoring:</p> <p>Industry has demonstrated through performance tests and historical data that opacity and particulate matter standards are consistently met when combustion units fire natural gas only, or natural gas and hydrogen.</p>	

Unit/Group/Process Information	
ID No.: HRSG2	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart D	SOP Index No.: 60D-GAS
Pollutant: PM	Main Standard: § 60.42(a)(1)
Monitoring Information	
Indicator: Fuel Type	
Minimum Frequency: Annually	
Averaging Period: n/a	
Deviation Limit: If an alternate fuel is fired, either alone or in combination with the specified gas, it shall be considered and reported as a deviation.	
Basis of monitoring: Industry has demonstrated through performance tests and historical data that opacity and particulate matter standards are consistently met when combustion units fire natural gas only, or natural gas and hydrogen.	

Obtaining Permit Documents

The New Source Review Authorization References table in the FOP specifies all NSR authorizations that apply at the permit area covered by the FOP. Individual NSR permitting files are located in the TCEQ Central File Room (TCEQ Main Campus located at 12100 Park 35 Circle, Austin, Texas, 78753, Building E, Room 103). They can also be obtained electronically from TCEQ's Central File Room Online (<https://www.tceq.texas.gov/goto/cfr-online>). Guidance documents that describe how to search electronic records, including Permits by Rule (PBRs) or NSR permits incorporated by reference into an FOP, archived in the Central File Room server are available at https://www.tceq.texas.gov/permitting/air/nav/air_status_permits.html

All current PBRs are contained in Chapter 106 and can be viewed at the following website:

https://www.tceq.texas.gov/permitting/air/permitbyrule/air_pbr_index.html

Previous versions of 30 TAC Chapter 106 PBRs may be viewed at the following website:

www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/old106list/index106.html

Historical Standard Exemption lists may be viewed at the following website:

www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/oldselist/se_index.html

Additional information concerning PBRs is available on the TCEQ website:

https://www.tceq.texas.gov/permitting/air/nav/air_pbr.html

Available Unit Attribute Forms

- OP-UA1 - Miscellaneous and Generic Unit Attributes
- OP-UA2 - Stationary Reciprocating Internal Combustion Engine Attributes
- OP-UA3 - Storage Tank/Vessel Attributes
- OP-UA4 - Loading/Unloading Operations Attributes
- OP-UA5 - Process Heater/Furnace Attributes
- OP-UA6 - Boiler/Steam Generator/Steam Generating Unit Attributes
- OP-UA7 - Flare Attributes
- OP-UA8 - Coal Preparation Plant Attributes
- OP-UA9 - Nonmetallic Mineral Process Plant Attributes
- OP-UA10 - Gas Sweetening/Sulfur Recovery Unit Attributes
- OP-UA11 - Stationary Turbine Attributes
- OP-UA12 - Fugitive Emission Unit Attributes
- OP-UA13 - Industrial Process Cooling Tower Attributes
- OP-UA14 - Water Separator Attributes
- OP-UA15 - Emission Point/Stationary Vent/Distillation Operation/Process Vent Attributes
- OP-UA16 - Solvent Degreasing Machine Attributes
- OP-UA17 - Distillation Unit Attributes
- OP-UA18 - Surface Coating Operations Attributes
- OP-UA19 - Wastewater Unit Attributes
- OP-UA20 - Asphalt Operations Attributes
- OP-UA21 - Grain Elevator Attributes
- OP-UA22 - Printing Attributes
- OP-UA24 - Wool Fiberglass Insulation Manufacturing Plant Attributes
- OP-UA25 - Synthetic Fiber Production Attributes
- OP-UA26 - Electroplating and Anodizing Unit Attributes
- OP-UA27 - Nitric Acid Manufacturing Attributes
- OP-UA28 - Polymer Manufacturing Attributes
- OP-UA29 - Glass Manufacturing Unit Attributes
- OP-UA30 - Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mill Attributes

OP-UA31 - Lead Smelting Attributes
OP-UA32 - Copper and Zinc Smelting/Brass and Bronze Production Attributes
OP-UA33 - Metallic Mineral Processing Plant Attributes
OP-UA34 - Pharmaceutical Manufacturing
OP-UA35 - Incinerator Attributes
OP-UA36 - Steel Plant Unit Attributes
OP-UA37 - Basic Oxygen Process Furnace Unit Attributes
OP-UA38 - Lead-Acid Battery Manufacturing Plant Attributes
OP-UA39 - Sterilization Source Attributes
OP-UA40 - Ferroalloy Production Facility Attributes
OP-UA41 - Dry Cleaning Facility Attributes
OP-UA42 - Phosphate Fertilizer Manufacturing Attributes
OP-UA43 - Sulfuric Acid Production Attributes
OP-UA44 - Municipal Solid Waste Landfill/Waste Disposal Site Attributes
OP-UA45 - Surface Impoundment Attributes
OP-UA46 - Epoxy Resins and Non-Nylon Polyamides Production Attributes
OP-UA47 - Ship Building and Ship Repair Unit Attributes
OP-UA48 - Air Oxidation Unit Process Attributes
OP-UA49 - Vacuum-Producing System Attributes
OP-UA50 - Fluid Catalytic Cracking Unit Catalyst Regenerator/Fuel Gas Combustion Device/Claus Sulfur Recovery Plant Attributes
OP-UA51 - Dryer/Kiln/Oven Attributes
OP-UA52 - Closed Vent Systems and Control Devices
OP-UA53 - Beryllium Processing Attributes
OP-UA54 - Mercury Chlor-Alkali Cell Attributes
OP-UA55 - Transfer System Attributes
OP-UA56 - Vinyl Chloride Process Attributes
OP-UA57 - Cleaning/Depainting Operation Attributes
OP-UA58 - Treatment Process Attributes
OP-UA59 - Coke By-Product Recovery Plant Attributes
OP-UA60 - Chemical Manufacturing Process Unit Attributes
OP-UA61 - Pulp, Paper, or Paperboard Producing Process Attributes
OP-UA62 - Glycol Dehydration Unit Attributes
OP-UA63 - Vegetable Oil Production Attributes